

CLAIMS

1. An anti-NAIP monoclonal antibody recognizing a human apoptosis inhibitory protein NAIP having the amino acid sequence of SEQ ID NO: 1, which is produced from hybridoma prepared by fusing a myeloma cell line with antibody-producing cell of mammal immunized by antigen containing a polypeptide which comprises amino acid sequence of the 256-586th, the 841-1052nd or parts thereof in SEQ ID NO: 1
2. Anti-NAIP monoclonal antibody hnm365, which is produced from hybridoma 656-1 (FERM BP-6919), and its epitope is the 354-365th region in SEQ ID NO: 1.
3. Anti-NAIP monoclonal antibody hnm381, which is produced from hybridoma 656-2 (FERM BP-6920), and its epitope is the 373-387th region in SEQ ID NO: 1.
4. Anti-NAIP monoclonal antibody hnm841, which is produced from hybridoma 841 (FERM BP-6921), and its epitope is the 841-1052nd region in SEQ ID NO: 1.
5. A method of assaying NAIP, which comprises contacting a marker-labeled anti-NAIP monoclonal antibody of claim 1 with a sample containing NAIP thereby binding the marker-labeled antibody with NAIP, and measuring signal strength of the marker in the bound structure.
6. The method of assaying NAIP of claim 5, wherein the anti-NAIP monoclonal antibody is any one of the monoclonal antibodies of claims 2 to 4.
7. The method of assaying NAIP of claim 5 or 6, wherein the marker is an enzyme, a radioactive isotope or a fluorescent colorant.

8. A method of assaying NAIP which comprises contacting an anti-NAIP primary antibody with a sample containing NAIP thereby binding the primary antibody with NAIP, further binding the bound structure with an anti-NAIP secondary antibody, and measuring signal strength of a marker bound with the secondary antibody, wherein:

(1) the primary antibody and the secondary antibody are both the anti-NAIP monoclonal antibody of claim 1;

(2) the primary antibody is the anti-NAIP monoclonal antibody of claim 1 and the secondary antibody is an anti-NAIP polyclonal antibody; or

(3) the primary antibody is an anti-NAIP polyclonal antibody and the secondary antibody is the anti-NAIP monoclonal antibody of claim 1.

9. The method of assaying NAIP of claim 8, wherein the primary antibody is immobilized on solid phase.

10. The method of assaying NAIP of claim 8 or 9, wherein the anti-NAIP monoclonal antibody is any one of the monoclonal antibodies of claims 2 to 4.

11. The method of assaying NAIP of claim 8, 9 or 10, wherein the marker is an enzyme, a radioactive isotope or a fluorescent colorant.

12. A NAIP assay kit at least including:

(a) a plate on which an anti-NAIP primary antibody is immobilized; and

(b) an anti-NAIP secondary antibody labeled with a marker, wherein:

(1) the primary antibody and the secondary antibody are both the anti-NAIP monoclonal antibody of claim 1;

(2) the primary antibody is the anti-NAIP monoclonal antibody of claim 1 and the secondary antibody is an anti-NAIP polyclonal antibody; or

(3) the primary antibody is an anti-NAIP polyclonal antibody and the secondary antibody is the anti-NAIP monoclonal antibody of claim 1.

13. The NAIP assay kit of claim 12, wherein the anti-NAIP monoclonal

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antibody is any one of the monoclonal antibodies of claims 2 to 4.

14. The NAIP assay kit of claim 12 or 13, wherein the marker is a radioactive isotope or a fluorescent colorant.

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15. The NAIP assaying kit of claim 12 or 13, wherein the marker is an enzyme and the kit further includes:

(c) a substrate which develops a color by the enzyme activity.

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16. A NAIP assaying kit at least including:

(a) a plate on which an anti-NAIP primary antibody is immobilized;

(b) an anti-NAIP secondary antibody; and

(c) a marker to be bound with the secondary antibody, wherein:

(1) the primary antibody and the secondary antibody are both the anti-NAIP monoclonal antibody of claim 1;

(2) the primary antibody is the anti-NAIP monoclonal antibody of claim 1 and the secondary antibody is an anti-NAIP polyclonal antibody; or

(3) the primary antibody is an anti-NAIP polyclonal antibody and the secondary antibody is the anti-NAIP monoclonal antibody of claim 1.

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17. The NAIP assaying kit of claim 16, wherein the anti-NAIP monoclonal antibody is any one of the monoclonal antibodies of claims 2 to 4.

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18. The NAIP assaying kit of claim 16 or 17, wherein the marker is a radioactive isotope or a fluorescent colorant.

19. The NAIP assaying kit of claim 16 or 17, wherein the marker is an enzyme and the kit further includes:

(d) a substrate which develops a color by the enzyme activity.

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